

TECHNICAL REVIEW DOCUMENT
For
RENEWAL OF OPERATING PERMIT 96OPAD172

Sinclair Transportation Company – Denver Products Terminal
Adams County
Source ID 0010019

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I. Purpose

This document establishes the basis for decisions made regarding the applicable requirements, emission factors, monitoring plan and compliance status of emission units covered by the renewed Operating Permit for the Sinclair Transportation Company – Denver Products Terminal. The previous Operating Permit for this facility was issued on October 1, 2003, was last revised on September 28, 2006 and expired on October 1, 2008. However, since a timely and complete renewal application was submitted, under Colorado Regulation No. 3, Part C, Section IV.C all of the terms and conditions of the existing permit shall not expire until the renewal operating permit is issued and any previously extended permit shield continues in full force and operation.

This document is designed for reference during the review of the proposed permit by the EPA, the public, and other interested parties. The conclusions made in this report are based on information provided in the renewal application submitted on July 25, 2007, comments on the draft permit submitted on [date], inspection reports, telephone conversations and various email correspondence with the applicant. Please note that copies of the Technical Review Document for the original permit and any Technical Review Documents associated with subsequent modifications of the original Operating Permit may be found in the Division files as well as on the Division website at <http://www.cdphe.state.co.us/ap/Titlev.html>. This narrative is intended only as an adjunct for the reviewer and has no legal standing.

Any revisions made to the underlying construction permits associated with this facility made in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised construction permit.

II. Description of Source

This facility consists of a petroleum products terminal which falls into the Standard Industrial Classification 5171. Processes include fourteen (14) storage tanks for gasoline, fuel oil #1, fuel oil # 2, ethanol and other petroleum liquids. The facility also contains a tank truck loading rack and a railcar loading rack. Ethanol is received via rail

rack. Emissions from the tank truck loading rack, tank # 1 and tank # 14 are controlled with a VCU.

The facility is located in the town of Henderson in the Denver Metro Area. The Denver Metro Area is classified as attainment/maintenance for particulate matter less than 10 microns in diameter (PM₁₀) and carbon monoxide (CO). Under that classification, all SIP-approved requirements for PM₁₀ and CO will continue to apply in order to prevent backsliding under the provisions of Section 110(I) of the Federal Clean Air Act. The Denver Metro Area is classified as non-attainment for ozone and is part of the 8-hr Ozone Control Area as defined in Regulation No. 7, Section II.A.1.

There are no affected states within 50 miles of the plant. The following Federal Class I designated areas are within 100 kilometers of the plant: Rocky Mountain National Park.

This facility is categorized as a NANSR major stationary source (Potential to Emit of VOC \geq 100 Tons/Year). Future modifications at this facility resulting in a significant net emissions increase (see Reg 3, Part D, Sections II.A.26 and 42) for VOC or a modification which is major by itself (Potential to Emit of \geq 100 TPY of VOC) may result in the application of the NANSR review requirements.

This facility is categorized as a PSD major stationary source (Potential to Emit \geq 100 Tons/Year for a listed source category) for VOC. Future modifications at this facility resulting in a significant net emissions increase (see Reg 3, Part D, Sections II.A.26 and 42) or a modification which is major by itself (Potential to Emit of \geq 100 TPY for a listed source category) for any pollutant listed in Regulation No. 3, Part D, Section II.A.42 for which the area is in attainment or attainment/maintenance may result in the application of the PSD review requirements.

There are no other Operating Permits associated with this facility for purposes of determining applicability of Prevention of Significant Deterioration regulations.

Emissions at the facility are as follows:

Pollutant	Potential to Emit (tpy)
NOX	6.0
VOC	146.5
CO	15.1
HAPs (total)	< 20.0
HAPs (individual)	< 8.0

C.A.S. #	SUBSTANCE	EMISSIONS (LB/YR)
71-43-2	Benzene	1392.5
1634-04-4	MTBE	4754.2
108-88-3	Toluene	2542.7
1634-0404	Xylenes	1806.4

Applicable Requirements

Although the facility is not a major source for HAPs, the EPA has been promulgating rules for area sources (sources that are not major), those requirements that could potentially apply to this facility are discussed below:

Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities (40 CFR Part 63 Subpart BBBBBB)

Final revision to the Gasoline Distribution MACT for area sources was published in the Federal Register on March 7, 2008 and applies to bulk gasoline terminals, defined as having a throughput greater than 20,000 gallons per day. This requirement affects gasoline storage tanks and gasoline loading racks. Per this requirement, the Division has determined that tanks S001 and S009 –S0013 and tank truck loading rack S015 at the Denver Products Terminal are subject to the provision of Subpart BBBBBB. Since the facility was an existing source (constructed prior to January 10, 2008), the source must comply with the requirements of Subpart BBBBBB by January 10, 2011.

Requirements in Subpart BBBBBB for floating roof tanks are not applicable to gasoline storage tank 1 (S001), which is a lifter roof tank.

Note that as of the date of revised permit issuance [insert issuance date], the requirements in 40 CFR Part 63 Subpart BBBBBB have not been adopted into Colorado Regulation No. 8, Part E by the Division and are therefore not state-enforceable. In the event that the Division adopts these requirements, these requirements will become both state and federally enforceable.

Gasoline Dispensing Facilities (40 CFR Part 63 Subpart CCCCCC)

Final revisions to the Gasoline Dispensing Facilities MACT for area sources were published in the Federal Register on June 25, 2008. The consideration of the Denver Products Terminal for this requirement is in regards to EU-19: Company Use Storage Tank. The definition of gasoline dispensing facility (GDF) is described as any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle. If tank EU-19 was used to fuel company vehicles with gasoline, the facility would be considered a GDF. Based on information provided by the source regarding EU-19, the tank contains fuel oil #2 and therefore is not subject to Subpart CCCCCC.

Paint Stripping and Miscellaneous Surface Coating Operations at Area Source (40 CFR Part 63 Subpart HHHHHH)

Sinclair reported that the painting activities reported as insignificant activity do not include paint stripping or surface coating operations applicable to Subpart HHHHHH.

Compliance Assurance Monitoring (CAM) Applicability

CAM applicability was reviewed during the first renewal application and applies to the tank truck loading rack (S015). The CAM requirements were included in the first renewal permit. The performance test and operating parameter monitoring requirements of Subpart BBBBBB are similar to the CAM requirements. The CAM plan added to Appendix G contains references to the conditions of Subpart BBBBBB.

The destruction of VOC is dependent upon combustion. The VCU is equipped with a thermal device to ensure that a flame is present. If the thermal device indicates there is no flame detected, the vapors will continue to stay in its original tank, S001, and not be routed to the VCU.

The Area Source MACT for Gasoline Distribution Bulk Terminals, Bulk Plants and Pipeline Facilities requires sources equipped with a thermal oxidation system to monitor the presence of a flame. The CAM rule specifies that monitoring required for a MACT standard is presumptively acceptable monitoring, provided that the monitoring is applicable to the performance of the control device (40 CFR Part 64 § 64.4(b)(4)). Since the MACT monitoring is for the same control device (an enclosed flare is considered a thermal oxidation system under the MACT), the Division considers that the indicators are presumptively acceptable.

Greenhouse Gases

In 2009 and 2010, EPA issued two rules related to Greenhouse Gases (GHG) that may affect the facility.

On October 30, 2009, EPA published a rule for the mandatory annual reporting of GHG emissions to EPA from large GHG emissions sources in 40 CFR part 98. The facility may be required to identify GHG emissions in future Title V permit applications. Such identification may be satisfied by including some or all of the information reported to EPA to meet the GHG reporting requirements.

III. Discussion of Modifications Made

Source Requested Modifications

The renewal application received on July 25, 2007 requested the following modifications:

- Language for both the tank truck and rail car loading racks (S015 and S016, respectively) change from gallons per hour capacity to gallons per minute per arm.
- Daily visible observation requirements for opacity changed to accommodate the facility's manned hours which are typically Monday through Friday.

The Division addressed the source's requested modifications as follows:

Section I.5 – Summary of Emission Units (and subsequent references to loading racks)

- All references to the tank truck loading rack and rail car loading rack capacities were changed to "gpm per arm" as requested. Regulation applicability for loading racks typically refers to throughput rather than capacity, therefore the Division honored the source's request to change the capacity description for the loading racks.

Section II – Condition 2.7

- There are no specific requirements or applicable regulations that required daily visible observations for this source. Daily visible observation requirements in Condition 2.7 were changed to only during manned hours.

Other Modifications

In addition to the source requested modifications, the Division has included changes to make the permit more consistent with recently issued permits, include comments made by EPA on other Operating Permits, as well as correct errors or omissions identified during inspections and/or discrepancies identified during review of this renewal.

The Division has made the following revisions to the Sinclair Transportation Company – Denver Products Terminal Operating Permit. These changes are as follows:

Page Following Cover Page

- It should be noted that the monitoring and compliance periods and report and certification due dates are shown as examples. The appropriate monitoring and compliance periods and report and certification due dates will be filled in after permit issuance and will be based on permit issuance date. Note that the source may request to keep the same monitoring and compliance periods and report and certification due dates as were provided in the original permit. However, it should be noted that with this option, depending on the permit issuance date, the first monitoring period and compliance period may be short (i.e. less than 6 months and less than 1 year).

Section I – General Activities and Summary

- Description of the facility's permitted activities was modified to incorporate other permitted petroleum liquids. This was a result of the source requesting clarification of permitted activities regarding the storage of biodiesel.
- Updated Condition 3.1 (status of source with respect to PSD requirements) to reflect Division's current standard language and current Regulation No. 3 citations. Since the facility is located west of Kiowa Creek, it is within the Denver Metro area 1-hr Ozone Attainment/Maintenance Area and 8-hr ozone non-attainment area.

Section II – Specific Permit Terms

- The facility wide HAP emissions limitations were changed from 10 tpy for any single HAP and 25 tpy for the total HAPs to 8 tpy and 20 tpy, respectively. Considering the sources actual emissions are far below the previously set limits, the new limits were set in accordance with CDPHE-PS-Memo 97 – 1 to avoid calculating emissions from insignificant activities.
- Conditions 1.7, 2.8, 4.2 (new) and 5 were added to include the applicable provisions of NESHAP Subpart BBBBBB. Because the CAM plan already in

place closely aligns with the requirement of this subpart, the alternative methods and “in lieu of” clauses were not included.

- Removed Condition 2.6.3 and 2.6.4 regarding the VCU. NSPS requirements define flares as without enclosure; the VCU at this facility is enclosed.
- Changed visible opacity limits in Condition 2.7 from 20% to 30% in accordance with Reg. 1, Section II.A.5 regarding smokeless flares. The new monitoring requirements refer to Method 9 rather than Method 22.
- Updated Compliance Assurance Monitoring language in Condition 2.11.
- The emission factors listed in Condition 4.1 were modified in accordance with EPA-453/R-95-107, Table 2.3. Gas factors were added in addition to the light liquid emission factors and the ‘other’ category was used for connection and drains.
- Former Condition 4.2, from Reg. 7, Section IX.A.7 regarding surface coating operating was removed as it does not apply to this source.

Section III – Permit Shield

- Updated the Regulation No. 3 citation for the permit shield.
- Updated streamlined language to the current version (4/16/2009).
- Changed justification for applicable requirement Regulation No. 6, Part A, Subparts K, Ka and Kb in reference to tank S001. The tank was an existing source prior to June 11, 1973 and therefore is grandfathered from Subparts K, Ka and Kb.

Section IV– General Permit Conditions

- Updated the general permit conditions to the current version (11/16/2010).

Appendices

- Updated Appendices B and C (Monitoring and Permit Deviation Reports and Compliance Certification Reports) to the newest versions (2/20/2007).
- EPA’s mailing address was revised (Appendix D).
- Cleared the list of modifications from Appendix F related to the previous issuance.
- The compliance assurance monitoring plan that was added as a supplement to the first renewal application was added to the Appendix G.
- Sinclair transports a small amount of intermediates and product across the facility’s fence line to a near-by customer, Frontier. This activity is considered insignificant activity and was added as such to Appendix A.